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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,553	12/14/2001	Masud Jenabi	46417.001012	6016

7590 03/03/2004

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EXAMINER

ISSING, GREGORY C

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,553

Applicant(s)

JENABI, MASUD

Examiner

Gregory C. Issing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-33 is/are pending in the application.
- 4a) Of the above claim(s) 12-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 23-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. This application contains claims 12-21 drawn to an invention nonelected with traverse in Paper No. 6 (7/18/03). A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 10 remains unclear with respect to a “chip is using a multifunction self-aligned gate process.” The statements by applicant do not correct the lack of clarity; how does a chip use a multifunction self-aligned gate process? The alleged support (Andricos) merely describes that the chips are manufactured by said process. The terminology “manufactured by” and “using” are not the same.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1, 2, 6-9, 11, 22-26, 28-31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Fassett et al.

7. The rejection is previously set forth in the last Office Action.

8. Applicant alleges that Fassett et al fail to disclose the use of phase bits 110 and 112 to control scan angle. Applicant alleges that there is nothing to suggest that the polarization switch 18a provides scan angle control, only selectable polarization states. Therefore, Applicant alleges Fassett also fails to disclose controlling the phase shifters.

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9. Claims 3-5 and 10, 27 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fassett et al.

10. The rejection is previously set forth in the last Office Action.

11. Applicant merely alleges that he does not agree with the rejection but fails to provide any support as to why the rejection is not proper. Applicant also alleges that the reference to Fassett et al is an improper primary reference since Fassett et al allegedly fail to teach the elements of claim 1.

Response to Arguments

12. Fassett et al is directed to devices for controlling the phase and polarization of microwave signals wherein as is known in the art a collimated beam of radio frequency can be formed and steered by controlling the phase of the energy radiated from each one of a plurality of antenna elements in an array (col. 1, lines 8-19). The switches 18a-18n provide phase shift and polarization control wherein as is known, radio frequency from a transmitter is collimated into a beam and directed in accordance with commands from a beam steering computer (col. 3, lines 1-17). The phase shifter/polarization switch is comprised of a plurality of serially connected phase bits that are effective to provide in combination a four bit phase shifter and a polarization switch (col. 3, lines 39-50). Figure 1 clearly shows beam steering computer 32 controlling the phase shifter/polarization switches. Additionally, once a particular polarization is selected, the phase delay is set (see col. 8, lines 4-12). Thus, applicant's argument that Fassett et al does not control scan angle is contrary to the teachings of the reference as well as to any phased array antenna and is unfounded. The antenna array of Fassett et al is clearly directed to a directional antenna array

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having a beam steering computer for controlling the phase shifts, which as is known in the art and disclosed therein forms and steers the RF energy.

13. With regard to the obviousness of the specific features, it is clear that Fassett et al teach phase resolution of 22.5° wherein each of the resolution bits is half of the preceding, i.e. 180° , 90° , 45° , and 22.5° . To provide a greater resolution at the expense of greater cost via more bits is obvious, i.e. more phase bits of 11.25° and 5.625° . The formation of beams an a phased array antenna conventionally controls the amplitude as well as the phase to form the beam, thus control of amplitude is clearly within the skill of the artisan and the scope of the phased array antenna of Fassett et al. Therefore, applicant's arguments are not convincing.

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

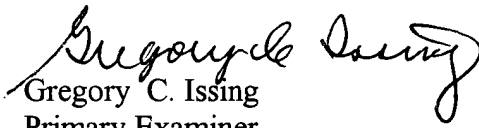
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (703)-306-4156.

The examiner can normally be reached on Mon-Thurs 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (703)-306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gregory C. Issing
Primary Examiner
Art Unit 3662

gci